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Applicant: Carl Cooper
Serial No: 08/486,000
Filed Date: June 8, 1995
Invention: IMPROVED PROGRAM VIEWING APPARATUS AND METHOD

Examiner: Rao, S.
Art Unit: 2603

1717 East Ninth Street
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Cleveland, Ohio 44114

May 21, 1997

COMMISSIONER OF PATENTS
AND TRADEMARKS
Washington, D.C. 20231

DECLARATION

Dear Commissioner:

My name is Carl Cooper.

I reside at 15288 Via Pinto, Monte Sereno,
California 95030.

I am admitted to the U.S. Patent Office as a patent
agent, Reg. No. 34,568. I am familiar with prosecution of
U.S. Patent Applications and Patent Office procedures.

I am employed at Pixel Instruments Corporation
located at 718 University Avenue, Suite 210, Los Gatos,
California 95030.

I am the co-inventor of U.S. Serial 08/322,069 filed
October 12, 1994 together with its continuation in part U.S.
Serial 08/486,000 filed June 8, 1995 entitled Improved Program
Viewing Apparatus And Method.

As a co-inventor, I began working on the invention
on or before January 14, 1993.

Between January, 1993 and May 1993, I cooperated
with co-inventor Steve Anderson (Anderson) in respect to the
ongoing development of the invention.

Prior to May 14, 1993 I conceived the idea of using the invention of U.S. Serial 08/322,069 in a system wherein signals including audio signals would be stored in a computerized system for random retrieval of a song or other program which could then be played back at a faster or lower speed as desired. On May 14, 1993 this information was communicated to Robert Frijouf (Frijouf) of Frijouf, Rust and Pile, a Patent Law Firm (see EX T).

On May 20, 1993, I spoke with Anderson in respect to the development of a software program which modifies the time of entertainment program. This included the ability to correct pitch and audio (see EX A).

From May 20, 1993 through June 3, 1993, I further cooperated with Anderson in respect to the development of the invention.

On June 3, 1993, I communicated with Anderson in respect to the development of an actual implementation of the device (see EX B).

On June 7, 1993, I further communicated with Anderson in respect to the various initial attributes of the invention and their pertinence (see EX C).

On June 7, 1993, I also communicated with Jack Millerick (Millerick), a cooperating engineer, in respect to the code for an embodiment of the invention (see EX D).

From June 7 through July 19, 1993, I further cooperated with Anderson in respect to the development of the invention.

On July 19, 1993, I communicated with Anderson in respect to the signal flow diagram for the SPROC internal processing (see EX E).

From July 19 through August 26, 1993, I further cooperated with Anderson in respect to the invention.

Further in August, 1993, I communicated with Anderson in respect to the time domain drawing for use in the patent application (see EX G). I further communicated with attorney Frijouf in respect to the initial diagram for the SPROC circuit including the theory behind the time domain (see EX H).

From August 26, through September 24, 1993, I continued to work with Anderson in respect to the invention.

On September 24, 1993 I communicated with Millerick in respect to the specification of the serial interface for an implementation of the invention (see EX I).

In addition to the above, I was developing further uses of the compression/expansion circuit for incorporation into other embodiments disclosed specifically in U.S. Serial 08/486,000.

From September 24 through November 15, 1993, I cooperated further with Anderson in respect to ongoing refinement of the invention.

On November 15, 1993, at my direction, Pixel Instruments communicated with Anderson in respect to an oscilloscope which was needed to aid in implementation of part of an embodiment of the invention (see EX J).

From November 15, 1993 through May 2, 1994, I further communicated with Anderson in respect to the

development and refinement of a physical embodiment of the invention.

Before January 7, 1994 I had performed enough market research and engineering study to incorporate the compression/expansion circuit into an entertainment system with sufficient detailed knowledge to develop a drawing showing the system embodied in a marketable entertainment system. On January 7, 1994 I communicated with Frijouf in respect to this figure and in particular the use of the user interface to allow an individual to perform various user functions including the use of an interface acting to position the scanning mechanism to perform start, stop, search and other functions. Further, this letter also included the use of storage devices which select where within the physical storage medium the data is read.

The content of the January 7, 1994 letter to Frijouf is included in U.S. Serial 08/322,069 in substantially the same words beginning on page 44 line 18 and continuing on to page 49 line 23. The drawing Figure X which was sent to Frijouf with the January 7, 1994 letter is included as Figure 25 in U.S. Serial 08/322,069 and as Figure 31 in the present U.S. Serial 08/486,000. The letter to Frijouf with Exhibits is attached as Exhibit U.

The use of a selective access to a particular song or other material in a storage medium was a function normally provided by consumer and industrial equipment prior to my January 7, 1994 communication with Frijouf.

On May 2, 1994, I communicated with Anderson in respect to the delay and pitch shifting feature of the invention (see EX K).

On May 3, 1994, I further communicated with Millerick in respect to an interface for the invention (see EX L).

From May 2, 1994 through June 20, 1994, I further communicated with Anderson in respect to the development of an embodiment of the invention.

On June 20, 1994, I communicated to Anderson in respect to the analog to digital and digital to analog converters and the percentage of pitch modification needed (see EX M).

From June 20, 1994 through July 25, 1994, I further cooperated with Anderson in respect to the invention.

On July 25, 1994, I communicated with Anderson in respect to the pricing for possible differing byte conversion (see EX N).

From July 25, 1994 through November 4, 1994, I further communicated with Anderson in respect to the invention.

During the time period of May 14, 1993 through October 14, 1994, I worked with my Patent Attorney in respect to the preparation and filing of U.S. Serial 08/322,069. During this time period, the application underwent many iterations and bloomed to having a 94 page specification including 155 separate claims. A copy of this application as filed is attached as Exhibit V.

On November 4, 1994, at my direction, Pixel Instruments communicated with the Publication Department at EBU in order to acquire certain specifications in order to further implement the invention (see EX O).

On November 7, 1994 and thereafter, at my direction, Pixel communicated with EBU Publications in respect to a AES11.1991 publication (see EX P).

On November 17, 1994, I communicated with Anderson in respect to an overview of the project and the functional specifications for an implementation of the invention (see EX Q).

From November 17, 1994 through December 5, 1994, I further cooperated with Anderson in respect to the implementation of the invention including an interface (see EX R).

On December 7, 1994, I communicated with Anderson in respect to the functional specification and the microprocessor control of an embodiment of the invention (see EX S).

From May 14, 1993 through August, 1993, I communicated with Frijouf in respect to the initial preparation of a patent application on the invention.

From August, 1993 through May, 1994, I communicated with Frijouf in respect to various drafts of the patent application.

On May 27, 1994, I requested that the patent application be transmitted to my present attorney, Lightbody, for completion.

From June, 1994 through October, 1994, I reviewed Lightbody's successive drafts and commented on the development

of the application materials. These included August and October, 1994 draft reviews and comments.

On October 12, 1994, parent application U.S. Serial 08/322,069 was filed.

From October 12, 1994 through June 8, 1995, I worked on modifying the text of U.S. Serial 08/322,069 in order to develop the main text of this present application U.S. Serial 08/486,000. This present application U.S. Serial 08/486,000 included virtually the verbatim text and the drawing of U.S. Serial 08/322,069 with the addition of new figures 1-6, additional materials to the specification, and new claims.

After the October 12, 1994 filing of U.S. Serial 08/322,069, I continued working on commercially valuable embodiments of the invention, including further research into existing products and needs and desires of potential customers while attending the 136th SMPTE Technical Conference and World Media Expo (SMPTE Conference) in Los Angeles October 12-15, 1994.

I continued to research existing products as well as the needs and desires of potential customers and to make investigations into these matters at the SMPTE Conference.

At the SMPTE Conference I witnessed the demonstration of early attempts at computer based video recorders and in particular witnessed numerous problems and shortcomings with storing and recalling video programs. I appreciated the invention could overcome many of these problems.

When I returned to the office after the SMPTE Conference on October 17, 1994 I began work on tailoring

specific embodiments of the invention to overcome the problems and shortcomings which I had witnessed. At the same time I began work to add specific details of these embodiments to the recently filed patent applications, the additions resulting in this present application U.S. Serial 08/486,000.

The specific embodiments added to this present application U.S. Serial 08/486,000 were in fact disclosed in the earlier application U.S. Serial 08/322,069, but at the time of the earlier application were not fully appreciated or covered with detailed drawings. The drawings 1-6 of the later application were added to round out coverage of the invention as a consequence of my new appreciation of the various problems which the invention could solve.

Figures 1 and 3-6 of U.S. Serial 08/486,000 show a detailed, and commercially valuable embodiment of the invention of Figure 25 of U.S. Serial 08/322,069 (corresponding to Figure 31). For example, the PROGRAM DATA STORAGE and REMOVABLE DATA STORAGE of Figure 1 correspond to 300 of Figure 25. The User Display and User Remote correspond to 310, The DATA MANAGER and PROGRAM DATA PROCESSOR(s) correspond to 320, 330 and 340.

From October 17, 1994 through April, 1995 I continued my work of tailoring specific embodiments of the invention to the problems and shortcomings.

On February 10 and 11, 1995 I attended the SMPTE Advanced Television and Electronic Imaging Conference in San Francisco where I further investigated specific commercial embodiments of the invention.

On April 10-13, 1995 I attended the National Association of Broadcasters Convention (1995 NAB) in Las Vegas at which the commercial embodiment of the invention matching Figure 20 and 21 of U.S. Serial 08/322,069 was demonstrated to prospective customers for the purpose of obtaining feedback on the performance of the product, as well as promoting the product for sale.

During the 1995 NAB I confidentially investigated the performance of the commercial embodiment of the invention matching Figure 20 and 21 of U.S. Serial 08/322,069 in respect to the potential use of those circuits in the embodiments of Figures 1 and 3-6 of the present application.

Based on the information learned at the 1995 NAB I afterward continued tailoring and modification of the preferred embodiment of the invention embodied in Figures 1 and 3-6 of U.S. Serial 08/486,000, as well as continuing work on preparing the application for filing.

Through the time period of April 17, 1995 through the filing of the application on June 8, I continued to work on both the application and the breadboard of the preferred embodiment of the invention embodied in Figures 1 and 3-6.

The claimed invention corresponding to Figures 1 and 3-6 of this present application U.S. Serial 08/486,000 was disclosed in basic form in the prior application U.S. Serial 08/322,069.

The work on the invention was continuous from on or before January 14, 1993 to the June 8, 1995 filing of U.S. Serial 08/486,000.

In my opinion these facts remove the Ryan Patent U.S. 5,524,051 as a reference based on this present Rule 131 declaration.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under section 101 of Title 18 of the USC and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

X 5/22/97
Date

X 
Carl Cooper